

REMARKS

Claims 1, 2, 4, 5, 15, 17, 19-21, 23 and 24 are now pending in this application. Claims 1-5 and 15-19 are rejected. Claims 3, 6-14, 16, 18 and 22 are previously cancelled. Claims 1 and 20 are amended herein to clarify the invention. New claims 23 and 24 are added.

Applicants herein traverse and respectfully request reconsideration of the rejection of the claims cited in the above-referenced Office Action.

Claims 1, 2, 5, 17 and 19-22 are rejected as obvious over Lang (US 4,994,053) in view of Packard et al. (US 4,851,069) under 35 U.S.C. §103(a). The applicants herein respectfully traverse these rejections.

In accordance with independent claims 1 and 20, a base sheet is held (wrapped/wound) on a receiving and transferring roller face. Powder particles are supplied to a concave groove of a temporary receiving roller face to form a powder particle layer. The powder particles which are temporarily held in the groove are then transferred onto a base sheet while shifting the powder particle layer held in the groove of the temporary receiving roller face. After such transfer, the base sheet, the powder particle layer and a covering sheet are bonded into an integral form while shifting the covering sheet in a held (wrapped/wound) state on a contact-bond fixing roller face.

Applicants respectfully submit that a distinguishing feature of the claimed invention of both independent claims 1 and 20 is that the powder particle layer

held in the groove of the temporary receiving roller is shifted at a shifting speed that is less than respective speeds of the base sheet and the covering sheet by rotating the temporary receiving roller, such that a surface peripheral velocity thereof is less than respective surface peripheral velocities of the contact-bond fixing roller and the receiving and transferring roller rotated faster than the temporary receiving roller.

Claim 20 specifies “a surface peripheral velocity of the temporary receiving roller being less than respective peripheral velocities of the contact-bond fixing roller and the receiving and transferring roller.” As a result of setting a shifting speed of the powder particle layer so as to be slower than the corresponding speeds of the contact-bond fixing roller and the receiving and transferring roller, the powder particle layer being transferred onto the base sheet becomes a linear shape or a blurred pattern in a shifting direction after deposition onto the base sheet (see page 23, lines 8-16 of the substitute specification, and the example illustrated in Figs. 3(e) and 3(f), wherein the speed of particle powder transfer is less than the speed of shifting of the base sheet (blurred pattern in a direction of shifting), as compared to the pattern shown in Figs. 3(c) and 3(d), wherein the speeds of base sheet shifting and the corresponding speeds of the contact-bond fixing roller and the receiving and transferring roller are the same (no blurring)). Applicants note that claims 1 and 20 are both amended to positively recite this novel feature absent in both of the cited references of record.

The Examiner admits that Lang fails to teach that “a shifting speed of the powder particle layer is made slower than respective speeds of the base sheet and the covering sheet.” (See page 3 of the final Office Action mailed June 21, 2010). Applicants respectfully submit that Packard et al. fails to adequately supplement this deficiency, and that therefore a *prima facie* case of obviousness cannot be properly established.

Regarding Packard et al., applicants respectfully submit that rotary brush 44 described therein is in no way structurally or functionally equivalent to the temporary receiving roller of the claimed invention. It merely functions to gate a rate of flow of particles AP from the hopper 42 (see col.6, lines 10-14), but not a speed of shifting relative to a shifting speed of the base sheet, of a discrete layer of powder particles contained and shifted in a held state within a groove of the temporary receiving roller. The Examiner even admits that the teachings of Packard are offered in support of the allegation that “it is known in the art that the deposition speed of the absorbent particles is a result effective variable, which controls the amount of powdered absorbent particles deposited on the substrate (column 8, lines 14-24, emphasis added).” Applicants wish to reiterate that the subject matter of claims 1 and 20 are specifically directed to altering a shifting speed of the powder particle layer relative to a corresponding shifting direction of the web of the base sheet, and not simply a deposition rate of the absorbent particles. The latter, as alleged to be taught by Packard only effects an amount of

particle deposited on the base sheet, whereas the former, claimed subject matter effects a “dragging,” i.e., blurring, of the powdered particles on the base sheet, as they are transferred thereto from the temporary receiving roller, as is now positively recited.

Because of the nature of the brush 44, it cannot affect a shifting speed of the powder particle layer. The only result effective variable expressed by the brush relates to the rate of discharge of the particles, and therefore volume accumulated.

Applicants further respectfully submit that the rejections are deficient on an additional basis. In the Office Action, the Examiner avers that a receiving web 12 of Lang corresponds to a base sheet of the present invention and that a transfer roll 190 shown therein corresponds to a receiving and transferring roller of the present invention. However, in Lang, the receiving web 188 is not held on the transfer roll 190, as positively recited, but is instead held on a depositing roll 184 (see Fig. 14 of Lang). It is noted that applicants' disclosure defines the term “held” as being in a “wrapped” state on the roller face (see the substitute specification, page 20, lines 6-14). The applicator roll 14 in Figs. 1 and 4 of Lang, was stated by the Examiner to correspond to the temporary receiving roller of the present invention. Thus, in Lang, the receiving web 188, which corresponds to the base sheet of the present invention, is not held (wrapped) on the transfer roll 190, which corresponds to the receiving and transferring roller of the present

invention, but rather, is held (wound) on the depositing roll 184, which corresponds to the temporary receiving roller of the present invention (see Fig. 14 of Lang).

In the present invention, the base sheet is held (wrapped/wound) on the receiving and transferring roller face, a powder particle layer formed on the temporary receiving roller is transferred onto the base sheet while shifting the powder particle layer retained in a groove of the temporary receiving roller face, and the powder particle layer is shifted at a shifting speed that is less than a transferring speed of the base sheet. As a result, the powder particle layer being transferred onto the base sheet becomes a linear shape or a blurred pattern in a shifting direction (see page 23, lines 8-16 of the substitute specification).

In stark contrast, the receiving web 12/188 in Lang is not held/wrapped on the transfer roll 190, but rather is wrapped on the depositing roll 184 (applicator roll 14), and particulate matter 84/180 formed on the depositing/applicator roll 14/184 is transferred onto the receiving web 12/188. Therefore, as a consequence of having the receiving web wrapped about the applicator roll, which has been equated with the temporary receiving roller of the claimed invention by the Examiner, the particulate matter 84/180 could not possibly be transferred onto the receiving web 12/188 in a liner shape or a blurred pattern, even if the particulate matter 84/180 were to be shifted at a shifting speed that is less than the speed of

the receiving web 12/188 by a slower rotation of the applicator roll as compared to a shifting speed of the web.

In Lang, when the particulate matter 84/180 is on the depositing/applicator roll 14/184, the particulate matter 84/180 is sustained by being held in compartments formed on the surface of the depositing/applicator roll 14/184 while being covered with the receiving web 12/188, irrespective of relative speeds of the depositing/applicator roll 14/184 and the receiving web 12/188. According to Lang, when the particulate matter 84/180 is released from the compartments on the depositing/applicator roll 14/184 to be shifted on the receiving web 12/188, the particulate matter 84/180 is formed into predefined discrete piles, regardless of relative speeds of the depositing/applicator roll 14/184 and the receiving web 12/188, because the receiving web 12/188 is held on the depositing/applicator roll 14/184. Thus, in Lang, the particulate matter 84/180 could not be transferred onto the receiving web 12/188 in a liner shape or a blurred pattern, even if the particulate matter 84/180 is shifted at a shifted speed that is less than the speed of the receiving web 12/188.

Thus, it is respectfully submitted that the rejected claims are not obvious in view of the cited references for the reasons stated above. Reconsideration of the rejections of claims 1, 2, 5, 17 and 19-22 and their allowance are respectfully requested.

Claims 4 and 15 are rejected as obvious over Lang (US 4,994,053) in view of Packard et al. (US 4,851,069), and further in view of Haubach (US 5,925,439) under 35 U.S.C. §103(a). The applicants herein respectfully traverse these rejections.

Applicants respectfully submit that Haubach fails to provide what is missing in Lang and Packard et al., as discussed above. As such, the proffered combination of references fails to teach or suggest all claimed elements, as properly required for establishing a *prima facie* case of obviousness.

Thus, it is respectfully submitted that the rejected claims are not obvious in view of the cited references for the reasons stated above. Reconsideration of the rejections of claims 4 and 15 and their allowance are respectfully requested.

Claims 23 and 24 are added and are submitted as patentable over the cited art of record. Independent claim 23 recites subject matter directed to setting a surface peripheral rotational velocity of a temporary receiving roller to be less than respective peripheral velocities of a contact-bond fixing roller and a receiving and transferring roller such that a powder particle layer held in at least one groove in the temporary receiving roller and transferred onto the base sheet is formed into a linear shape or a blurred pattern in a directing of shifting of the base sheet which, among other features recited therein, is not believed disclosed in the cited art in the manner as claimed. Dependent claim 24 is patentable based on the subject matter recited therein in addition to the subject matter of claim 23.

An RCE is being filed herewith in which applicants request a one-month extension of time.

In light of the foregoing, the application is now believed to be in proper form for allowance of all claims and notice to that effect is earnestly solicited.

Respectfully submitted,

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